

Bartlett, Carroll County. A more extended visit on 9 September of the same year disclosed the plant on similar damp rocks on the west slope and also in the coarse gravels of the summit (2009 feet), both places being a little west of the county line in Hadley's Grant, Coös County. At the present, then, we may probably regard this ledge as the northeastern limit of the species. Near *A. stricta* in the Carroll County station was its congener, *A. groenlandica* (Retz.) Spreng., which is not uncommon on the mountains of the Montalban Range, but which is perhaps seldom found in so incongruous a situation as here, growing under the shade of red oak trees! Other species of interest noted upon the ledge were *Panicum latifolium* L., *Oryzopsis racemosa* (Sm.) Ricker, *Polygonum scandens* L., *P. Douglasii* Greene (in great abundance on both dry and damp ground, in the sun and in the shade), a slender native *Chenopodium* matching the description of *C. leptophyllum* Nutt., var. *oblongifolium* Wats., *Cardamine parviflora* L., *Geranium Robertianum* L., *G. Bicknellii* Britton, *Arctostaphylos Uva-ursi* (L.) Spreng., and *Specularia perfoliata* (L.) A. DC. Of these the two *Polygonums*, the *Chenopodium*, and the *Arctostaphylos* are new to Coös County, while the *Panicum*, the *Cardamine*, and the *Specularia* are unreported from that county but on Hart's Ledge miss inclusion within its limits by only a few hundred feet. Specimens of all the plants mentioned are to be deposited in the herbarium of the New England Botanical Club. It may be remarked that the vicinity of Bartlett, where plants of the warmer district of east central New Hampshire mingle with those of the colder areas of Crawford Notch and the Montalban and Rocky Branch Ranges, and where the numerous lower mountains are diversified by frequent cliffs and extensive open ledges, offers many attractions to the collector.—
ARTHUR STANLEY PEASE, Urbana, Illinois.

THE OCCURRENCE OF *BOTRYCHIUM VIRGINIANUM*, var. *EUROPAEUM* IN AMERICA.—About the Gulf of St. Lawrence, especially on the west coast of Newfoundland, the south coast of the Labrador Peninsula, and on the Gaspé Peninsula of Quebec, there occurs a grape-fern clearly related to *Botrychium virginianum* (L.) Sw., but differing in the much less dissected segments of the sterile frond and, in its most characteristic development, in its heavy or firm texture. The plant proves to be a very close match for the European material passing

as *B. virginianum*, a plant which, as represented in the Gray Herbarium and as shown by the plates illustrating the Scandinavian and Russian specimens, departs from the common Alleghanian and eastern Asiatic material in exactly the points indicated above. This European plant was set off by Presl as *B. anthemoides*,¹ but has subsequently been treated as *B. virginianum*, var. *europaeum* Ångström.²

Besides the material from the region of the Gulf of St. Lawrence, characteristic specimens have been seen from the Thunder Bay District, Ontario, and from northern New England. In New England some of the plants seem to be exactly intermediate, as judged by the cutting of the frond, between *B. virginianum* and var. *europaeum*, but south of this area all the plants seem to be typical *B. virginianum*. The plant with the less dissected frond, being the only representative of the species in Europe and occurring in North America chiefly north of the range of typical *B. virginianum*, seems to the writers to be well separated as a variety which should be called *B. virginianum* (L.) Sw., var. *europaeum* Ångström.—M. L. FERNALD and HAROLD ST. JOHN.

BIDENS CONNATA PETIOLATA.—At Franklin, Connecticut, in low meadows, *B. connata petiolata* occurs with noticeably large heads and with achenes considerably exceeding the length of 4–6 mm. given for the species in the last edition of the Manual. In the Franklin plants the mature central achenes are 8–9 mm. long. Very few central achenes shorter than 8 mm. were found in the many heads examined by the writer. The measurements refer to large, well developed heads. The awns, too, are longer than in the species, as well as stouter, and the two pairs are often of equal length. Short golden-yellow rays are usually developed early but soon fall away. The plants are abundant in Franklin Meadows, and very uniform in habit. They show well a difference between variety and species, which seems, so far as the writer's observation extends, to be constant, but is, however, more readily recognized in the field than in the herbarium. In the typical form of the species the head is low and hemispherical, while in the variety it is taller and cylindrical, or at full maturity slightly broadened upward. In fresh plants the contrast is striking. Specimens have been deposited in the Gray Herbarium.—R. W. WOODWARD, New Haven, Connecticut.

¹ Presl. Abh. böhm. Ges. ser. 5, v. 323 (1848).

² Ångström, Botaniska Notiser (1854) 68.